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PATENT Customer No. 22,852 Attorney Docket No. 10142.0004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Evy LUNDGREN-AKERLUND) Group Art Unit: 1644
Application No.: 10/517,210)) Examiner: Maher M. Haddad \
Filed: March 9, 2005) Confirmation No.: 4342
For: MARKER FOR STEM CELLS AND ITS USE)))
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450)
Sir:	

RESPONSE TO RESTRICTION REQUIREMENT

In an Office Action dated November 2, 2006, the period for response being extended to December 4, 2006, as December 2, 2006, was a Saturday and December 3, 2006, was a Sunday, the Examiner required restriction under 35 U.S.C. § 121 between nine groups:

- **Group I** Claims 1-4, 6 and 15, drawn to a method for identifying stem cells, wherein expression of integrin alpha 10 is detected by an immunoassay;
- **Group II** Claims 1-4, 6 and 15, drawn to a method for identifying stem cells, wherein expression of integrin alpha 10 and alpha 11 is detected by an immunoassay;
- **Group III** Claims 1-3, 5 and 15, drawn to a method for identifying stem cells, wherein expression of integrin alpha 10 is detected by mRNA;
- **Group IV** Claims 1-3, 5 and 15, drawn to a method for identifying stem cells, wherein expression of integrin alpha 10 and alpha 11 is detected by mRNA;

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Group V - Claims 7 and 8, drawn to a method for determining whether a test compound modulates stem cell differentiation, wherein the stem cell expresses integrin alpha 10;

Group VI - Claims 7 and 8, drawn to a method for determining whether a test compound modulates stem cell differentiation, wherein the stem cell expresses integrin alpha 10 and alpha 11;

Group VII - Claims 9-11 and 17, drawn to a method for producing an isolated population of cells enriched in stem cells;

Group VIII - Claims 12-14 and 18, drawn to a population of cells enriched in stem cells expressing integrin alpha 10 or integrin alpha 10 and alpha 11; and

Group IX - Claim 16, drawn to a method for modulating differentiation of a stem cell.

According to Office, Groups I-VII and IX are different methods that differ with respect to ingredients, steps and endpoints, and therefore restriction of the invention to one of the nine listed groups is required under 35 U.S.C. § 121. Office Action, page 3. Applicant respectfully traverses.

The instant application is a national stage filing under 35 U.S.C. § 371 and thus unity of invention practice applies to the application. To satisfy unity of invention, the claims must be united by a single inventive concept that contributes a special technical feature to the art. The claims of the instant application are all united by the single inventive concept of the use of integrin alpha 10 chain or integrin alpha 10 chain and integrin alpha 11 chain as a marker for mammalian mesenchymal stem cells. This inventive concept is a special technical feature that is unique to the art. Accordingly, restriction is improper.

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Applicant also refers the Examiner to M.P.E.P. § 803, which sets forth the criteria

and guidelines for Examiners to follow in making proper requirements for restriction.

The M.P.E.P. instructs the Examiner as follows:

If the search and examination of an entire application can be made without serious burden, the Office must examine it on the merits, even though it includes claims to distinct or

independent inventions.

M.P.E.P. § 803 (emphasis added). In the instant case, the Examiner has not

demonstrated that examining Groups I-IX together would constitute a serious burden.

Accordingly, Applicant requests that the restriction requirement be withdrawn.

However, to be fully responsive, Applicant provisionally elects to prosecute Group I.

claims 1-4, 6 and 15.

The Examiner has also indicated that claims 1-3 and 15 link Groups I-IV.

Applicant respectfully requests that, upon the allowance of claims 1-3 and 15, the

Examiner withdraw the restriction requirement between Groups I-IV and examine all of

claims 1-6 and 15 in the instant application.

If the Examiner believes a telephone conference would be useful in resolving any

outstanding issues, the Examiner is invited to call the undersigned at (202) 408-4442.

If there is any fee due in connection with the filing of this Response, please

charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW.

GARRETT & DUNNER, L.L.P.

Dated: December 4, 2006

By: John C. Stolpa

Reg. No. 57,632